Bergamid™ B80 TM-Z UV

Polyamide 6

Key Characteristics

General		
Material Status	• Commercial: Active	
Regional Availability	• Africa & Middle East • Asia Pacific	• Europe • North America
Features	• Heat Aging Resistant • High Impact Resistance	• High Viscosity • UV Stabilized
RoHS Compliance	• RoHS Compliant	
Appearance	• Natural Color	
Forms	• Pellets	
Processing Method	• Extrusion	• Injection Molding

Technical Properties [1]

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density [2]	1.05 g/cm³	1.05 g/cm³	ISO 1183
K-Value [3]	80.0 to 85.0	80.0 to 85.0	
Mechanical	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Tensile Modulus	319000 psi	2200 MPa	ISO 527-2
Tensile Stress (Break)	7250 psi	50.0 MPa	ISO 527-2
Tensile Strain (Break)	> 60 %	> 60 %	ISO 527-2
Impact	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Charpy Notched Impact Strength			
-22°F (-30°C)	> 4.8 ft·lb/in²	> 10 kJ/m²	ISO 179
73°F (23°C)	> 12 ft·lb/in²	> 25 kJ/m²	ISO 179/1eA
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F (-30°C)	No Break	No Break	
73°F (23°C)	No Break	No Break	
Thermal	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Heat Deflection Temperature			ISO 75-2/B
66 psi (0.45 MPa), Unannealed	266 °F	130 °C	
Heat Deflection Temperature			ISO 75-2/A
264 psi (1.8 MPa), Unannealed	140 °F	60.0 °C	
Continuous Use Temperature [4]	194 °F	90.0 °C	IEC 60216
Melting Temperature (DSC)	419 to 437 °F	215 to 225 °C	ISO 3146
Electrical	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Comparative Tracking Index	600 V	600 V	IEC 60112
Flammability	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Flame Rating	HB	HB	UL 94

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Drying Temperature	176 °F	80 °C
Drying Time	4.0 hr	4.0 hr
Processing (Melt) Temp	482 to 500 °F	250 to 260 °C

Injection	Typical Value (English)	Typical Value (SI)
Mold Temperature	104 to 176 °F	40 to 80 °C

Notes

[1] Typical values are not to be construed as specifications.

[2] +/-0.02

[3] 96% H2SO4

[4] continous (GTP 50% Tensile)